

End-stage Renal Disease (ESRD) among Persons with Diabetes

According to the Centers for Disease Control and Prevention (CDC), the final stage of chronic kidney disease is end-stage renal disease (ESRD). ESRD requires kidney dialysis (filtering of blood through a machine) or a kidney transplant. ESRD is a major cause of hospitalization, disability, morbidity, and mortality for persons with diabetes.

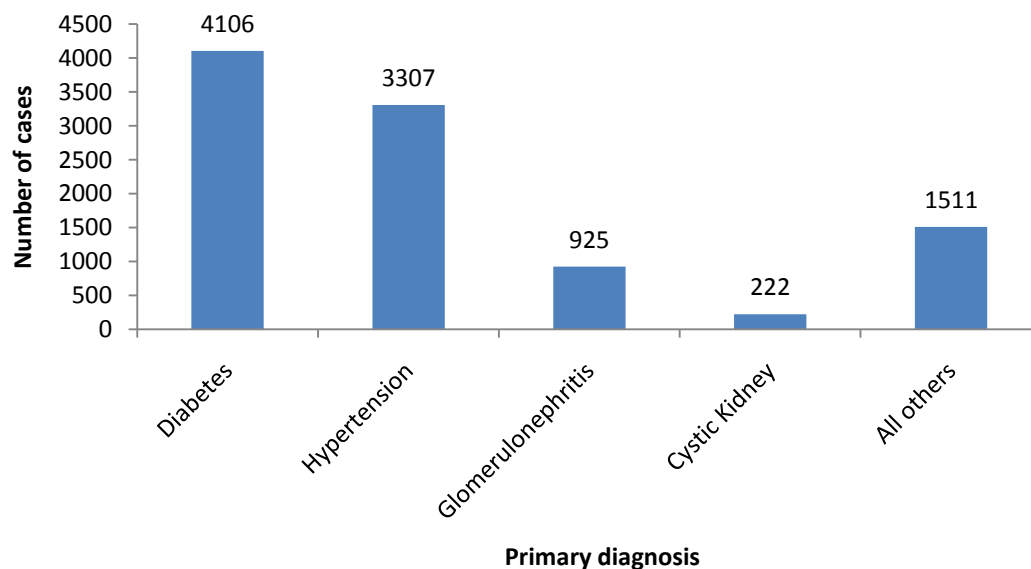
Persons with diabetes can keep their kidneys healthy by controlling blood sugar and blood pressure.

Prevalence of End-Stage Renal Disease

Prevalence refers to the total number of people with an existing condition or disease, including new diagnoses, at a point in time.

- In 2010, there were 4,106 diabetes-related cases of ESRD in Virginia, accounting for 40% of all existing cases. Hypertension was the second highest cause of ESRD.
- Persons with diabetes were over 7 times as likely to have ESRD as those without diabetes: ESRD prevalence among persons with diabetes was 591.4/100,000; among persons without diabetes, 82.8/100,000.

Total cases (prevalence) of ESRD by primary diagnosis, Virginia, 2010



Source: Mid-Atlantic Renal Coalition Data Set, 2010.

Incidence of End-Stage Renal Disease

Incidence refers to the number of newly diagnosed or detected cases of a disease during a specific time interval, such as one year.

End-stage renal disease incidence and prevalence by diabetes status, gender, and race/ethnicity, Virginia, 2010

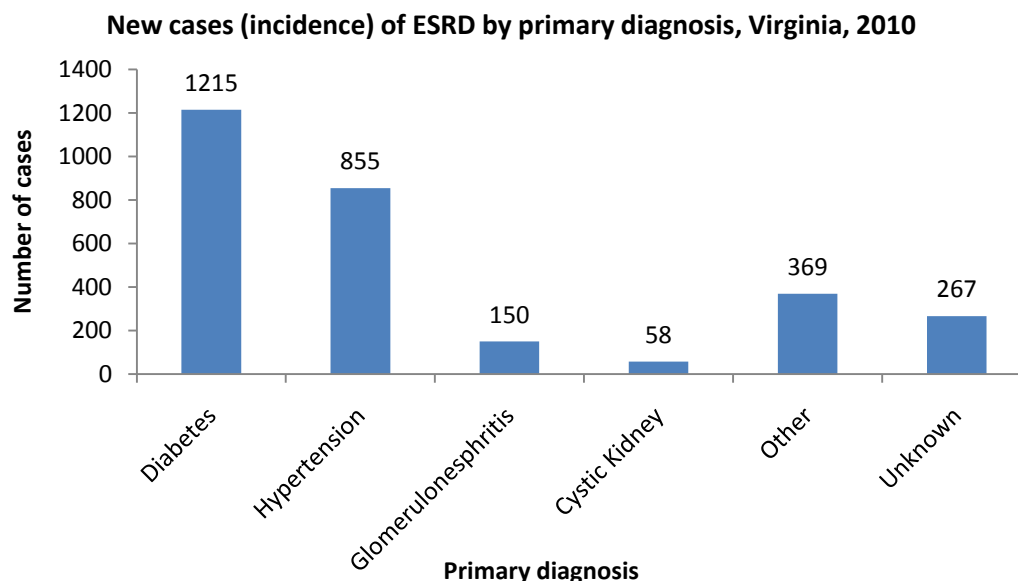
	Incidence		Prevalence	
	With diabetes	Without diabetes	With diabetes	Without diabetes
Gender				
Female	171.9	19.2	597.2	68.3
Male	177.6	28.0	585.3	98.0
Race/ethnicity				
White, NH	132.4	17.7	332.6	42.1
Black, NH	260.7	57.5	1,128.1	266.6
Hispanic/Latino	163.2	9.4	502.5	44.5
Other, NH	112.1	8.8	381.5	34.7
Total	174.9	23.5	591.4	82.8

Source: Mid-Atlantic Renal Coalition Data Set, 2010.

Data note: All rates are per 100,000 population, using 2010 U.S. Census data.

Both ESRD prevalence and incidence varied by race/ethnicity in 2010:

- ESRD prevalence among NH black Virginians with diabetes was nearly twice as high as among NH white Virginians (260.7 per 100,000 vs. 132.4 per 100,000).
- ESRD incidence among NH black Virginians with diabetes was at least two times that of any other racial/ethnic group, and more than three times greater than the incidence among NH white Virginians with diabetes.
- Both incidence and prevalence among persons with diabetes were several times greater than rates among persons without diabetes.
- In 2010, there were 1,215 new cases of diabetes-related ESRD, accounting for 41 percent of all new cases. Hypertension was the second highest cause of new cases of ESRD.
- In 2010, individuals with diabetes were nearly nine times as likely to be diagnosed with ESRD as those without diabetes: the incidence rate among persons with diabetes was 171.9 cases per 100,000; without diabetes 19.2 cases per 100,000.



Source: Mid-Atlantic Renal Coalition Data Set, 2010.